

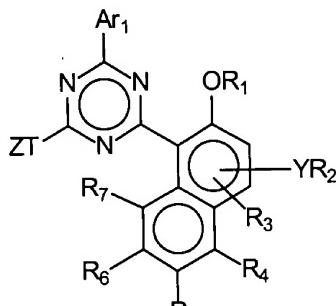
What is claimed is:

1. A triazine compound of Formula I:

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Sub A 1



Formula I

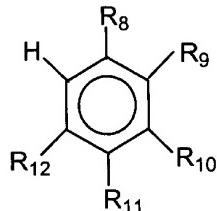
- wherein R₁, R₂, are the same or different and each is hydrogen, alkyl of 1 to 24 carbon atoms,
alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms,
cycloalkyl of 5 to 25 carbon atoms, cycloacyl of 5 to 24 carbon atoms, aralkyl of 7 to 24 carbon
atoms, aracyl of 6 to 24 carbons atoms, COR, CONRR', and SO₂R;
R₃, R₄, R₅, R₆ and R₇ are the same or different and each is hydrogen, halogen, alkyl of 1 to 24
carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, aryl of 6 to 24
carbon atoms, cycloalkyl of 5 to 25 carbon atoms, cycloacyl of 5 to 24 carbon atoms, aralkyl of 7
to 24 carbon atoms, aracyl of 6 to 24 carbons atoms, OR, NRR', CONRR', OCOR, CN, SR,
SO₂R, SO₃H, SO₃M, wherein M is an alkali metal, R and R' are the same or different and each is
hydrogen, alkyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, alkenyl of 2 to 24 carbon
atoms, acyl of 1 to 24 carbon atoms, cycloalkyl of 1 to 24 carbon atoms, cycloacyl of 5 to 24
carbon atoms, aralkyl of 7 to 24 carbon atoms, or aracyl of 7 to 24 carbons atoms;
T is a direct bond, oxygen, NR' or sulfur; Z is a hydrogen, halogen, substituted or unsubstituted
alkyl of 1 to 24 carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms,
aracyl of 7 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, aralkyl of 7 to 24 carbon atoms,
cycloalkyl of 5 to 24 carbon atoms, cycloacyl of 5 to 24 carbon atoms, substituted or
unsubstituted alkyl of 1 to 24 carbon atoms interrupted with at least one hetero atom, cycloalkyl
of 5 to 24 carbon atoms interrupted with at least one hetero atoms, CONR"R'", SO₂R'" or Ar₂,

wherein R^{'''} is substituted or unsubstituted alkyl group of 1 to 24 carbon atoms; R^{'''} is hydrogen or substituted or unsubstituted alkyl group of 1 to 24 carbon atoms and wherein Ar₁ and Ar₂ are each independently a radical of Formula II

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SJY
A'

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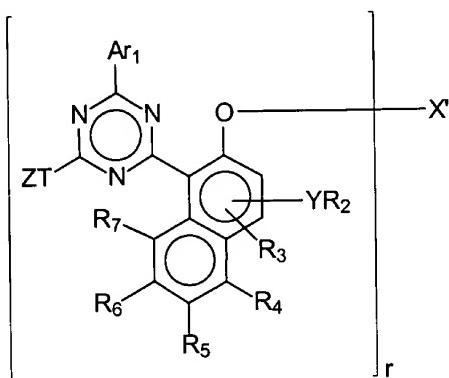
Formula II

wherein R₈, R₉, R₁₀, R₁₁, and R₁₂ are the same or different and each is hydrogen, halogen, alkyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, aralkyl of 7 to 24 carbon atoms, aracyl of 6 to 24 carbon atoms, OR, NRR', CONRR', OCOR, CN, SR, SO₂R, SO₃H, SQ₃M, wherein M is an alkali metal, and optionally with either of R₈ and R₉, R₉ and R₁₀, R₁₀ and R₁₁, or R₁₁ and R₁₂, taken together being a part of a saturated or unsaturated fused carbocyclic ring optionally containing O, N, or S atoms in the ring with the proviso that the radical of Formula II is not a naphthyl substituted with a hydroxyl group ortho to the point of attachment to the triazine ring.

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2. The compound of claim 1, wherein T is a direct bond and Z is Ar₂.
3. The compound of claim 2, wherein R₃, R₄, R₅, R₆ and R₇ are hydrogen.
4. The compound of claim 3, wherein Y is an oxygen, R₁ is hydrogen, R₂ is hydrogen or an alkyl of 1 to 24 carbon atoms.
5. The compound of claim 3, wherein Y is a direct bond, and R₁ and R₂ are hydrogen.
6. The compound of claim 3, wherein Ar₁ and Ar₂ are selected from a group consisting of: phenyl, methylphenyl, dimethylphenyl, diphenyl, phenyl ether, tetralin, tert-butylphenyl, ethylphenyl, propylphenyl, isopropylphenyl, butylphenyl, isobutylphenyl, chlorophenyl, methoxyphenyl, hydroxyphenyl and combinations thereof.
7. A triazine compound of Formula III

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Formula III

wherein T, Z, Ar₁, Y, R₂ to R₇ are defined as in claim 1;

r is 2 or 3;

15 when r is 2, X' is —CO—R¹⁶—CO—, —CO₂—R¹⁶—CO₂—, —SO₂—R¹⁶—SO₂—, —CO—NH—R¹⁷—NH—CO—, a polyoxyalkylene bridge member of formula —CO—(CH₂)_u—O—(CH₂—(CH₂)_u—O)_{mm}—(CH₂)_u—CO—, or —COC(R²¹)HCH₂NH(C_{nn}H_{2nn}O)_mC_{nn}H_{2nn}-NHCH₂-C(R²¹)HCO—

20 when r = 3, X' is:

—(—CO₂—R¹⁶)₃R¹⁹, —(—CONH—R¹⁶)₃R¹⁹, —(—SO₂—R¹⁶)₃R¹⁹;

wherein

R¹⁶ is C₂—C₁₀ alkylene, C₂—C₁₀ oxaalkylene or C₂—C₁₀ dithiaalkylene, phenylene, naphthylene, diphenylene or C₂—C₆ alkenylene;

25 R¹⁷ is C₂—C₁₀ alkylene, phenylene, naphthylene, methylenediphenylene or C₇—C₁₅ alkylphenylene;

R¹⁹ is C₃—C₁₀ alkanetriyl;

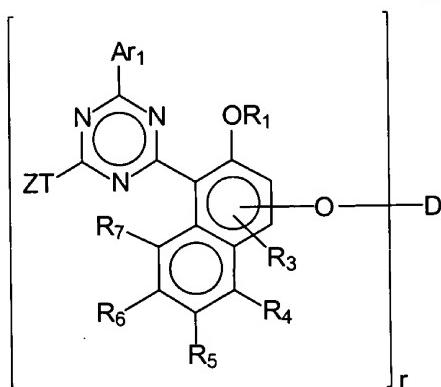
R²¹ is hydrogen or C₁—C₆ alkyl;

mm is an integer from 2 to 60,

30 nn is an integer from 2 to 6, and

u is an integer from 1 to 4.

8. A triazine compound of Formula IV



Formula IV

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wherein T, Z, Ar₁, Y, R₁ to R₇ are defined as in claim 1;

r is an integer between 2 and 4;

- when r is 2, D is selected from the group consisting of C₂—C₁₆ alkylene, C₄—C₁₂ alkenylene, xylylene, C₃—C₂₀ alkylene which is interrupted by one or more oxygen atoms, hydroxy-substituted C₃—C₂₀ alkyl which is interrupted by one or more oxygen atoms, —CH₂CH(OH)CH₂O—R¹⁵—OCH₂CH(OH)CH₂, —CO—R¹⁶—CO—, —CO—NH—R¹⁷—NH—CO—, —(CH₂)_s—COO—R¹⁸—OCO—(CH₂)_s— a polyoxyalkylene bridge member of the formula XX
—CH₂—CH(OH)—CH₂—O—(CH₂—(CH₂)_u—O—)_{mm}—CH₂—CH(OH)—CH₂— (XX),
- a polyoxyalkylene bridge member of the formula XXI
—CO—(CH₂)_u—O—(CH₂—(CH₂)_u—O—)_{mm}—(CH₂)_u—CO— (XXI),
- a polyoxyalkylene bridge member of the formula XXII
—YY—O—CO(CH₂)_u—O—(CH₂—(CH₂)_u—O—)_{mm}—(CH₂)_u—COO—YY— (XXII),
- a polyoxyalkylene bridge member of the formula XXIII
—(CH₂)_{kk}—CH(R²¹)—CO—B₁—(C_{nn}H_{2nn}—O—)_{mm}C_{nn}H_{2nn}—B₁—CO—CH(R²¹)—(CH₂)_{kk}— (XXIII),
- a polyoxyalkylene bridge member of the formula XXIV
—CO(C(R²¹)HCH₂NH(C_{nn}H_{2nn}O)_mC_{nn}H_{2nn}—NHCH₂—C(R²¹)HCO— (XXIV),
- a polyoxyalkylene bridge member of the formula XXV
—YY—O—CO—(CH₂)₂—NH—(C_{nn}H_{2nn}—O—)_{mm}—C_{nn}H_{2nn}—NH—(CH₂)₂COO—YY— (XXV),
- a polyoxyalkylene bridge member of the formula XXVI
—(C_{nn}H_{2nn}—O—)_{mm}—C_{nn}H_{2nn}— (XXVI),
- and a polyoxyalkylene bridge member of the formula XXVII
—CH(CH₃)—CH₂—(O—CH(CH₃)—CH₂)_a—(O—CH₂—CH₂)_b—(O—CH₂—

CH(CH₃)_c—

(XXVII),

wherein a + c = 2.5 and b = 8.5 to 40.5 or a + c = 2 to 33 and b = 0,

R²¹ is hydrogen or C₁—C₁₆ alkyl,

YY is unsubstituted or substituted C₂—C₂₀ alkyl,

5 kk is zero or an integer from 1-16,

mm is an integer from 2 to 60,

nn is an integer from 2 to 6,

u is an integer from 1 to 4;

B₁ is O or NH;

10 R¹⁵ is C₂—C₁₀ alkyl, C₂—C₁₀ oxaalkyl or C₂—C₁₀ dithiaalkyl, phenyl, naphthyl, diphenyl, or C₂—C₆ alkenyl, or phenylene-XX-phenylene wherein XX is —O—, —S—, —SO₂—, —CH₂—, or —C(CH₃)₂—;

R¹⁶ is C₂—C₁₀ alkyl, C₂—C₁₀ oxaalkyl or C₂—C₁₀ dithiaalkyl, phenyl, naphthyl, diphenyl, or C₂—C₆ alkenyl provided that when r is 3 the alkenyl has at least 3 carbons;

15 R¹⁷ is C₂—C₁₀ alkyl, phenyl, naphthyl, diphenyl, or C₂—C₆ alkenyl, methylenediphenylene, or C₄—C₁₅ alkylphenyl; and

R¹⁸ is C₂—C₁₀ alkyl, or C₄—C₂₀ alkyl interrupted by one or more oxygen atoms.

when r is 3, D is —[—(CH₂)_s—COO—]₃—R¹⁹

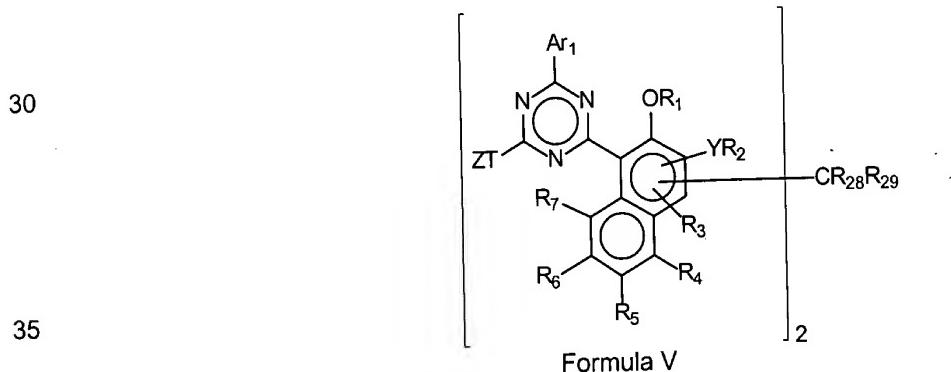
20 and when r is 4, D is —[—(CH₂)_s—COO—]₄—R²⁰

wherein R¹⁹ is C₃—C₁₀ alkanetriyl;

R²⁰ is C₄—C₁₀ alkanetetrayl; and

25 s is 1-6.

9. A triazine compound of Formula V

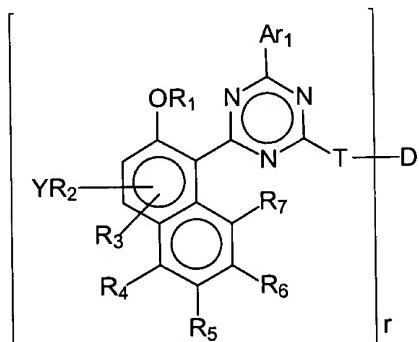


wherein T, Z, Ar₁, Y, R₁ to R₇ are defined as in claim 1;
and wherein R₂₈ and R₂₉ can be the same or different and each is independently a hydrogen, a C₁-C₂₀ alkyl, an aryl or substituted C₁-C₂₀ aryl.

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10. A triazine compound of Formula VI

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Formula VI

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wherein T, Ar₁, Y, R₁ to R₇ are defined as in claim 1;

r is an integer between 2 and 4;

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when r is 2, D is selected from the group consisting of C₂-C₁₆ alkylene, C₄-C₁₂ alkenylene, xylylene, C₃-C₂₀ alkylene which is interrupted by one or more oxygen atoms, hydroxy-substituted C₃-C₂₀ alkylene which is interrupted by one or more oxygen atoms, —OOCR¹⁴COO—, —CH₂CH(OH)CH₂O—R¹⁵—OCH₂CH(OH)CH₂, —CO—R¹⁶—CO—, —CO—NH—R¹⁷—NH—CO—, and —(CH₂)_s—COO—R¹⁸—OCO—(CH₂)_s—; and

25

when r is 3, D is —[(CH₂)_s—COO]₃—R¹⁹

and when r is 4, D is —[(CH₂)_s—COO]₄—R²⁰

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wherein R¹⁹ is C₃-C₁₀ alkanetriyl and R²⁰ is C₄-C₁₀ alkanetetryl;

s is 1-6;

R¹⁴ is C₁-C₁₂ alkyl or phenyl;

R¹⁵ is C₂-C₁₀ alkylene phenylene or a phenylene-X₂-phenylene- group, wherein X₂ is —

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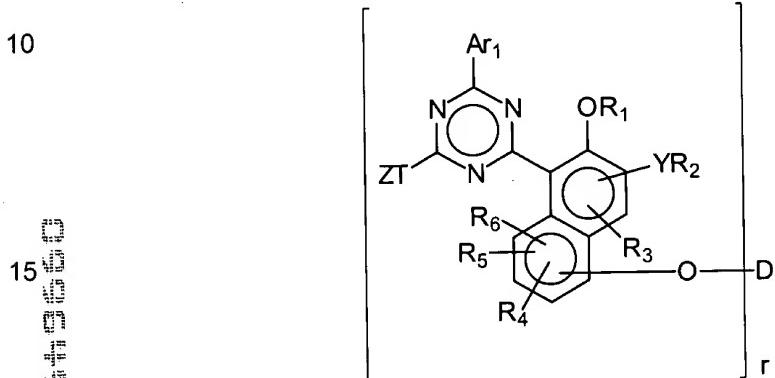
O—, —S—, —SO₂—, —CH₂—, or —C(CH₃)₂—;

R^{16} is C_2-C_{10} alkylene, C_2-C_{10} oxaalkylene or C_2-C_{10} dithiaalkylene, phenylene, naphthylene, diphenylene or C_2-C_6 alkenylene;

R^{17} is C_2-C_{10} alkylene, phenylene, naphthylene, methylenediphenylene or C_7-C_{15} alkylphenylene, and

5 R^{18} is C_2-C_{10} alkylene or C_4-C_{20} alkylene which is interrupted by one or more oxygen atoms.

11. A triazine compound of Formula VII



20 Formula VII

wherein T, Z, Ar₁, Y, R₁ to R₇ are defined as in claim 1;

25 r is an integer between 2 and 4;

when r is 2, D is selected from the group consisting of C_2-C_{16} alkylene, C_4-C_{12}

25 alkenylene, xylylene, C_3-C_{20} alkylene which is interrupted by one or more oxygen atoms, hydroxy-substituted C_3-C_{20} alkylene which is interrupted by one or more oxygen atoms, $-OOCR^{14}COO-$, $-CH_2CH(OH)CH_2O-R^{15}-OCH_2CH(OH)CH_2$, $-CO-R^{16}-$ $CO-$, $-CO-NH-R^{17}-NH-CO-$, and $-(CH_2)_s-COO-R^{18}-OCO-(CH_2)_s-$; and

30 when r is 3, D is $-[(CH_2)_s-COO]_3-R^{19}$

and when r is 4, D is $-[(CH_2)_s-COO]_4-R^{20}$

wherein R^{19} is C_3-C_{10} alkanetriyl and R^{20} is C_4-C_{10} alkanetetryl;

35 s is 1-6;

R^{14} is C_1-C_{12} alkyl or phenyl;

R¹⁵ is C₂—C₁₀ alkylene phenylene or a phenylene-X₂-phenylene- group, wherein X₂ is —O—, —S—, —SO₂—, —CH₂—, or —C(CH₃)₂—;

R¹⁶ is C₂—C₁₀ alkylene, C₂—C₁₀ oxaalkylene or C₂—C₁₀ dithiaalkylene, phenylene, naphthylene, diphenylene or C₂—C₆ alkenylene;

5 R¹⁷ is C₂—C₁₀ alkylene, phenylene, naphthylene, methylenediphenylene or C₇—C₁₅ alkylphenylene, and

R¹⁸ is C₂—C₁₀ alkylene or C₄—C₂₀ alkylene which is interrupted by one or more oxygen atoms.

10 12. A method of stabilizing a material comprising the step of contacting said material with the triazine compounds of claims 1, 6, 7, 8, 9, 10 or 11.

13. The method of claim 12 wherein said material to be stabilized is selected from the group consisting of: polyolefins, polyesters, polyethers, polyketones, polyamides, natural and synthetic rubbers, polyurethanes, polystyrenes, high-impact polystyrenes, polyacrylates, polymethacrylates, polyacetals, polyacrylonitriles, polybutadienes, polystyrenes, ABS, styrene acrylonitrile, acrylate styrene acrylonitrile, cellulosic acetate butyrate, cellulosic polymers, polyimides, polyamideimides, polyetherimides, polyphenylsulfides, polyphenylene oxide, polysulfones, polyethersulfones, polyvinylchlorides, polycarbonates, polyketones, aliphatic polyketones, thermoplastic TPO's, amino resin crosslinked polyacrylates and polyesters, polyisocyanate crosslinked polyesters and polyacrylates, phenol/formaldehyde, urea/formaldehyde and melamine/formaldehyde resins, drying and non-drying alkyd resins, alkyd resins, polyester resins, acrylate resins cross-linked with melamine resins, urea resins, isocyanates, isocyanurates, carbamates, epoxy resins, cross-linked epoxy resins derived from 25 aliphatic, cycloaliphatic, heterocyclic and aromatic glycidyl compounds, which are cross-linked with anhydrides or amines, polysiloxanes, Michael addition polymers, amines, blocked amines with activated unsaturated and methylene compounds, ketamines with activated unsaturated and methylene compounds, polyketamines in combination with unsaturated acrylic polyacetoacetate resins, polyketamines in combination with unsaturated acrylic resins, radiation curable 30 compositions, epoxymelamine resins, organic dyes, cosmetic products, cellulose-based paper formulations, photographic film paper, ink, and mixtures thereof.

14. The method of claim 12 wherein the amount of said triazine compound is about 0.1 to about 20% by weight based on the material to be stabilized.

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15. A composition comprising

(a) the triazine compounds of claims 1, 6, 7, 8, 9, 10 or 11; and

(b) at least one other additive selected from the group consisting of: UV-absorbers and light stabilizers, and antioxidants.

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16. The composition of claim 15 wherein said at least one other additive is selected from the group consisting of 2-(2'-hydroxyphenyl)benzotriazoles, oxamides, 2-(2-hydroxyphenyl)-1,3,5-triazines, 2-hydroxybenzophenones, sterically hindered amines and hindered phenol antioxidants.

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17. The composition of claim 15 wherein said at least one additive is selected from the group consisting of: 2-(2'-hydroxy-5'-methylphenyl)-benzotriazole; 2-(3',5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(5'-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-

15 (1,1,3,3-tetramethylbutyl)phenyl)benzotriazole; 2-(3',5'-di-tert-butyl-2'-hydroxyphenyl)-5-chlorobenzotriazole; 2-(3'-tert-butyl-2'-hydroxy-5'-methylphenyl)-5-chloro-benzotriazole; 2-(3'-sec-butyl-5'-tert-butyl-2'-hydroxyphenyl)-benzotriazole; 2-(2'-hydroxy-4'-octoxyphenyl)benzotriazole; 2-(3',5'-di-tert-amyl-2'-hydroxyphenyl)benzotriazole; 2-(3',5'-bis(α,α -dimethylbenzyl)-2'-hydroxyphenyl)-benzotriazole; a mixture of 2-(3'-tert-butyl-2'-hydroxy-5'-(2-octyloxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-5'-[2-(2-ethylhexyloxy)-carbonylethyl]-2'-hydroxyphenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2-

20 methoxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2-methoxycarbonylethyl)phenyl)benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2-octyloxycarbonylethyl)phenyl)benzotriazole, 2-(3'-tert-butyl-5'-[2-(2-ethylhexyloxy)carbonylethyl]-2'-hydroxyphenyl)benzotriazole, 2-(3'-dodecyl-2'-hydroxy-5'-methylphenyl)benzotriazole and 2-

25 (3'-tert-butyl-2'-hydroxy-5'-(2-isooctyloxycarbonylethyl)phenylbenzotriazole; 2,2-methylenebis[4-(1,1,3,3-tetramethylbutyl)-6-benzotriazol-2-ylphenol], the transesterification product of 2-[3'-tert-butyl-5'-(2-methoxycarbonylethyl)-2'-hydroxyphenyl]benzotriazole with polyethylene glycol 300;

[R—CH₂CH—COO(CH₂)₃]₂ B where R = 3'-tert-butyl-4'-hydroxy-5'-2H-benzotriazol-2-ylphenyl;

bis(2,2,6,6-tetramethylpiperidin-4-yl) sebacate; bis(2,2,6,6-tetramethylpiperidin-4-yl)succinate;

30 bis(1,2,2,6,6-pentamethylpiperidin-4-yl)sebacate; bis(1-octyloxy-2,2,6,6-tetramethylpiperidin-4-yl)sebacate; bis(1,2,2,6,6-pentamethylpiperidin-4-yl) n-butyl 3,5-di-tert-butyl-4-hydroxybenzylmalonate; the condensate of 1-(2-hydroxyethyl)-2,2,6,6-tetramethyl-4-

hydroxypiperidine and succinic acid; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-tert-octylamino-2,6-dichloro-1,3,5-triazine; tris(2,2,6,6-

35 tetramethylpiperidin-4-yl) nitrilotriacetate; tetrakis(2,2,6,6-tetramethylpiperidin-4-yl)- 1,2,3,4-butanetetracarboxylate; 1,1'-(1,2-ethanediyl)bis(3,3,5,5-tetramethylpiperazinone); 4-benzoyl-

2,2,6,6-tetramethylpiperidine; 4-stearyl-2,2,6,6-tetramethylpiperidine; bis(1,2,2,6,6-pentamethylpiperidyl)-2-n-butyl-2-(2-hydroxy-3,5-di-tert-butylbenzyl)malonate; 3-n-octyl-7,7,9,9-tetramethyl-1,3,8-triazaspiro[4.5]decan-2,4-dione; bis(1-octyloxy-2,2,6,6-tetramethylpiperidyl)sebacate; bis(1-octyloxy-2,2,6,6-tetramethylpiperidyl)succinate; the
5 condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-morpholino-2,6-dichloro-1,3,5-triazine; the condensate of 2-chloro-4,6-bis(4-n-butylamino-2,2,6,6-tetramethylpiperidyl)-1,3,5-triazine and 1,2-bis(3-aminopropylamino)ethane; the condensate of 2-chloro-4,6-bis(4-n-butylamino-1,2,2,6,6-pentamethylpiperidyl)-1,3,5-triazine and 1,2-bis(3-aminopropylamino)ethane; 8-acetyl-3-dodecyl-7,7,9,9-tetramethyl-1,3,8-
10 triazaspiro[4.5]decane-2,4-dione; 3-dodecyl-1-(2,2,6,6-tetramethylpiperidin-4-yl)pyrrolidin-2,5-dione; 3-dodecyl-1-(1-ethanoyl-2,2,6,6-tetramethylpiperidin-4-yl)pyrrolidin-2,5-dione; a mixture of 4-hexadecyloxy- and 4-stearyl-2,2,6,6-tetramethylpiperidine; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-cyclohexylamino-2,6-dichloro-1,3,5-triazine; the condensate
15 of 1,2-bis(3-aminopropylamino)ethane, 2,4,6-trichloro-1,3,5-triazine and 4-butylamino-2,2,6,6-tetramethylpiperidine; 2-undecyl-7,7,9,9-tetramethyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane; oxo-piperanzinyl-triazines and the reaction product of 7,7,9,9-tetramethyl-2-cycloundecyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane and epichlorohydrin;
20 2,4,6-tris(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-n-octyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-(mixed iso-octyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2,4-dihydroxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2,4-bis(2-hydroxy-4-propoxyphenyl)-6-(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-hydroxy-4-octyloxyphenyl)-4,6-bis(4-methylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-dodecyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-tridecyloxyphenyl)-
25 4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-butyloxypropoxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-octyloxypropoxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[4-dodecyloxy/tridecyloxy-2-hydroxypropoxy)-2-hydroxyphenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-dodecyloxypropoxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-hexyloxyphenyl)-4,6-diphenyl-1,3,5-triazine; 2-(2-hydroxy-4-methoxyphenyl)-4,6-diphenyl-1,3,5-triazine; 2,4,6-tris[2-hydroxy-4-(3-butoxy-2-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-1,3,5-triazine, 2,4-dihydroxybenzophenone; 2-hydroxy-4-methoxybenzophenone; 2-hydroxy-4-octyloxybenzophenone; 2-hydroxy-4-decyloxybenzophenone; 2-hydroxy-4-
30 dodecyloxybenzophenone; 2-hydroxy-4-benzyl-2-hydroxybenzophenone, 4,2',4'-trishydroxybenzophenone; 2'-hydroxy-4,4'-dimethoxybenzophenone;

- 1,3,5-tris(2,6-dimethyl-4-tert-butyl-3hydroxybenzyl)isocyanurate; 1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl)isocyanurate; 1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl)-2,4,6-trimethylbenzene; 2,6-di-tert-butyl-4-methylphenol; 2,2'-ethylidene-bis(4,6-di-tert-butylphenol); 1,1,3-tris(5-tert-butyl-4-hydroxy-2-methylphenyl)butane; esters of β -(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid with mono- or polyhydric alcohols;
- 5 esters of β -(5-tert-butyl-4-hydroxy-3-methylphenyl)propionic acid with mono- or polyhydric alcohols; dimethyl-2,5-di-tert-butyl-4-hydroxybenzylphosphonate; diethyl-3,5-di-tert-butyl-4-hydroxybenzylphosphonate; dioctadecyl-3,5-di-tert-butyl-4-hydroxybenzylphosphonate; dioctadecyl-5-tert-butyl-4-hydroxy-3-methylbenzylphosphonate; and the calcium salt of the
- 10 monoethyl ester of 3,5-di-tert-butyl-4-hydroxybenzylphosphonic acid; amides of β -(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid such as N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)hexamethylenediamine; N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)trimethylenediamine; and N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)hydrazine.
- 15 18. The composition of claim 15 further comprising a material to be stabilized, said material selected from the group consisting of: polyolefins, polyesters, polyethers, polyketones, polyamides, natural and synthetic rubbers, polyurethanes, polystyrenes, high-impact polystyrenes, polyacrylates, polymethacrylates, polyacetals, polyacrylonitriles, polybutadienes, polystyrenes, ABS, styrene acrylonitrile, acrylate styrene acrylonitrile, cellulosic acetate butyrate, cellulosic polymers, polyimides, polyamideimides, polyetherimides, polyphenylsulfides, polyphenylene oxide, polysulfones, polyethersulfones, polyvinylchlorides, polycarbonates, polyketones, aliphatic polyketones, thermoplastic TPO's, amino resin crosslinked polyacrylates and polyesters, polyisocyanate crosslinked polyesters and polyacrylates, phenol/formaldehyde, urea/formaldehyde and melamine/formaldehyde resins, drying and non-drying alkyd resins, alkyd resins, polyester resins, acrylate resins cross-linked with melamine resins, urea resins, isocyanates, isocyanurates, carbamates, epoxy resins, cross-linked epoxy resins derived from aliphatic, cycloaliphatic, heterocyclic and aromatic glycidyl compounds, which are cross-linked with anhydrides or amines, polysiloxanes, Michael addition polymers, amines, blocked amines with activated unsaturated and methylene compounds, ketimines with activated unsaturated and methylene compounds, polyketimines in combination with unsaturated acrylic polyacetoacetate resins, polyketimines in combination with unsaturated acrylic resins, radiation curable compositions, epoxymelamine resins, organic dyes, cosmetic products, cellulose-based paper formulations, photographic film paper, ink, and mixtures thereof.

19. The composition of claim 15 wherein the amount of said triazine compound to said at least one other additive is from about 500:1 to about 1:500 by weight.

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